Date

## Biology 2nd 9 Weeks, Weeks 2.6-2.7 Homework 2 (Skeletal System)

You have a skeletal system inside your body made of bones. The skeletal system primarily functions to support and protect you. The bones of the skeleton provide a framework to which the muscles and other organs can attach. The bones of the skull protect your brain. The bones of the vertebrae protect your spinal cord, and the bones of the ribcage protect most of your other vital organs. In addition, the skeletal system works with the muscular system to help you move.

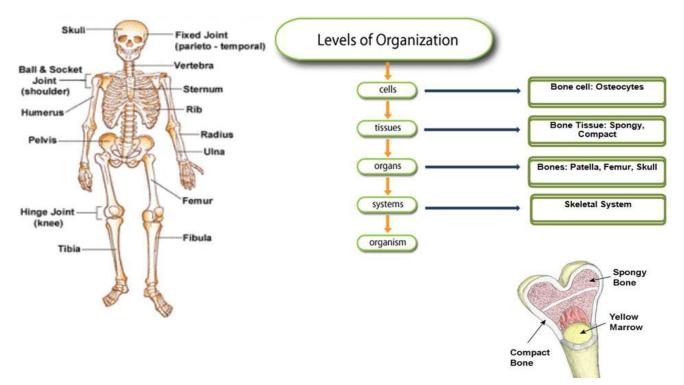
Let's revisit the levels of organization.

## $\textbf{cells} \rightarrow \textbf{tissues} \rightarrow \textbf{organs} \rightarrow \textbf{organ systems} \rightarrow \textbf{organisms}$

Bones are the organs of the skeletal system. The place where two bones meet is called a joint, and the bones attach to each other through ligaments. Bones are protected at joints by a thin, soft, flexible layer of cartilage.

Bones are made of two types of tissue: spongy bone and compact bone. Spongy bone is the soft, interior layer of bone. Spongy bone contains bone marrow which is the site of blood cell production. You will recall that blood cells are a vital part of the circulatory system.

Compact bone is the dense, strong, outer layer of tissue surrounding the bone. Compact bone stores minerals such as calcium. Calcium is necessary for efficient muscle contractions. If you do not have a healthy supply of calcium in your diet, your body will borrow it from your bones causing low bone density.



- 1. The skeletal system works with the \_\_\_\_\_\_ system to produce movement.
  - a. muscular
  - b. endocrine
  - c. respiratory
  - d. digestive

Justification -

- 2. The skeletal system functions primarily to \_\_\_\_\_\_.
  - a. break down food into smaller molecules
  - b. deliver nutrients to every cell in the body
  - c. provide protection and support
  - d. deliver nutrients to every cell in the body

Justification -

- 3. Two bones meet at a \_\_\_\_\_\_and connect to each other through a \_\_\_\_\_\_.
  - a. tendon, ligament
  - b. joint, ligament
  - c. joint, tendon
  - d. tendon, ligament

Justification -

- 4. The skeletal system works with the circulatory system by \_\_\_\_\_.
  - a. thickening the capillary walls
  - b. lowering the activation energy of a reaction
  - c. delivering oxygen for transport
  - d. producing blood cells in the bones

Justification-

- 5. The heart is protected by the bones of the \_\_\_\_\_.
  - a. skull
  - b. ribcage
  - c. vertebrae

Justification -